

Pervasive captivity and urban wildlife

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Abstract. Urban animals can benefit from living in cities, but this also makes them vulnerable as they increasingly depend on the advantages of urban life. This article has two aims. First, I provide a detailed analysis of the concept of captivity and explain why it matters to nonhuman animals—because and insofar as many of them have a (non-substitutable) interest in freedom. Second, I defend a surprising implication of the account—pushing the boundaries of the concept while the boundaries of cities and human activities expand. I argue for the existence of the neglected problem of *pervasive captivity*, of which urban wildlife is an illustration. Many urban animals are confined, controlled and dependent, therefore often captive of expanding urban areas. While I argue that captivity per se is value-neutral, I draw the ethical and policy implications of harmful pervasive captivity.

Introduction

Nonhuman animals¹ living in urban areas have received, as such, scarce scrutiny in philosophy.² Rats, pigeons, raccoons, squirrels, and coyotes challenge common frameworks, primarily designed to address the case of either domesticated or wild animals, or those we use for research or entertainment. Urban animals are neither fully wild nor properly domesticated, they are both free-roaming and dependent, ambivalent figures of nature in the city. Urban wildlife is also both typical—many of the usual suspects being found worldwide, precisely because they thrive in cities—and variable—depending on local ecosystems. Animals that sound exotic to many people may be common sights in urban quarters over the world, such as macaques and sacred cows across India, baboons in Cape Town, or leopards in Mumbai. Urban animals encompass feral and stray animals (cats, dogs, pigs, horses, etc.), scavengers (pigeons, gulls, mallards, crows, rats, squirrels, raccoons, etc.), some of whom are considered ‘pests’ or ‘vermin,’ and other native and nonnative animals whose habitat overlaps or intersects with urban areas (coyotes, bears, cougars, geese, raptors, badgers, skunks, possums, groundhogs, deer, foxes, elks, pigs, monkeys, etc.). They reside in our parks and squares, underground and aboveground, amidst and on the outskirts of cities. In cities, animals can benefit from milder temperatures, tall buildings, underground dens, abundant

¹ For brevity’s sake, hereafter I use the term ‘animals.’ I will, however, use person pronouns (who/whom, they) to refer to individual animals.

² Unlike social sciences (e.g., in sociology, ethnography, and geography). For a few exceptions, see Michelfelder (2003; 2018), Palmer (2003a,b; 2010) and Donaldson and Kymlicka (2011).

food supplies, protection from hunting, predation, and inclement weather. Meanwhile, they are vulnerable to anthropogenic threats, from road vehicles, planes, buildings, windows, and windmills, to city lights, traps, poison, and predation by companion animals. Like urban animals, captivity had until recently received only scarce philosophical attention³ unlike, for instance, suffering, coercion, domination and other cognate concepts. Atypical forms of captivity have received even scarcer attention. As Lori Gruen notes, “Many institutions of captivity are largely invisible, hidden from sight and awareness” [e.g., prisons, factory farms, laboratories] (2014, 1). “In contrast, some institutions of captivity are so normalized that it is hard to think of them in the same category as prisons or factory farms or laboratories” [e.g., pet-keeping and zoos] (p. 2). In this paper, I tie together these two separate threads and offer an account of *pervasive captivity*, pushing the conceptual boundaries of captivity as the physical boundaries of human encroachment expand. Urban animals serve as a test case of the idea of pervasive captivity.⁴ Urban animal captivity is both hidden and normalized—hidden in plain sight. I argue that the best account of captivity has surprising implications, one of which is that some free-roaming animals are captive. And because freedom is part of a good life for these animals, what impact urbanization has on their freedom is ethically significant in ways that should affect urban wildlife management and policy. In the first section, I begin by defining the concept of captivity and introducing my preferred account. In section 2, I briefly consider how the criteria apply to urban animals and then describe various kinds of pervasive captivity. In section 3, I address the objection that urban animals cannot be captive

³ This changed with Lori Gruen’s *The Ethics of Captivity* (2014). See her introduction. Two recent examples include DeGrazia (2011) and Streiffer and Killoren (2018).

⁴ Two caveats are in order. *First*, the concept of urban animals is fuzzy. In what has become known as the Anthropocene, nature and the lives of most wild animals are significantly shaped by human activities. Urban wildlife nonetheless stands out as a distinctive range of human-animal interactions and should be of concern to environmental ethicists and animal ethicists (Light 2001; Light and Wellman 2003; Michelfelder 2003). Donaldson and Kymlicka (2016) argue that we need new ways of understanding the ethical significance of various human-animal entanglements, and write, “[t]he fact that humans inevitably affect and interact with ever more animals does not alter the fact that animals’ lives are still theirs to lead, and that human management and intervention is legitimate only insofar as it respects animals as intentional agents.” (p. 225). What matters is not that we affect urban animals’ lives, but how and why, and the impact we have on “wild” animals differs from the sort of control we have on “liminal” animals. I also do not mean to make evaluative judgments about urban versus rural life or wildness, or to echo the history of workers migrating from the country to the city in the 19th century. *Second caveat*: urban animals include many more taxa than I can mention, including insects, arachnids, centipedes, etc.— the bulk of the urban biomass. I make no assumption about their welfare and its significance. There is growing evidence that many invertebrates are sensitive to pain and perhaps conscious—whether this is sufficient for having interests in freedom is unclear, though.

because they benefit from their situation, and I argue that captivity is value-neutral. Finally, section 4 outlines some ethical implications of pervasive captivity.

1. Defining captivity

1.1. *Captivity, freedom, and options*

By way of preliminary characterization, we could say that one is captive when one is deprived of freedom of movement, or prevented from exercising one's autonomy by physical and spatial constraints. Captivity, that is, involves *confinement*. Captivity deprives humans or animals of many goods and opportunities, prevents them from having, doing, and experiencing a number of things. This explains the commonly held presumption against detaining humans or animals without adequate justification:⁵ captivity is a deprivation of freedom and being free is valuable. If freedom is valuable for animals, then keeping them captive causes them a *pro tanto* harm. I will assume throughout that sentient animals exercise some form of control over what to do, when, and where and with whom to do it. It is beyond the scope of this paper to defend an account of animal agency and freedom, but if animals can be agents, then this has ethical implications.⁶ Why does it matter if animals can be (un)free? As I argue below, because it interferes with a central component of a good life.

The sort of freedom that seems necessary for the presumption to apply consists in the capacity to choose to do, which abnormal external constraints hinder, what one wants, desires or prefers to do (whether it is also sufficient depends on what external constraints we deem normal or acceptable). One is free depending on one's *options* (i.e. one is unfree to X if and only if one's range of options is adversely restricted).⁷ Captive animals are capable of many things they would otherwise be disposed to do, and which matter to them. Of course, maximal freedom may not be best and restrictions may be necessary. Freedom may be traded off for other goods such as health or safety; and one can consent to being kept captive. The *pro tanto* harm of captivity does not necessarily make it wrong all things considered. The presumption against captivity is also distinct

⁵ See in particular chapters 11 and 12 of Jamieson (2003) and Rachels (1976).

⁶ See Delon (2018), Donaldson and Kymlicka (2011), Gruen (2011), Jamieson (2017) and Sebo (2017).

⁷ Following Schmidt (2015), I endorse an *opportunity conception* of the freedom that matters to animals. My argument does not turn on whether other (social or political) senses apply to them (e.g. "psychological" freedom and "status" freedom; see Schmidt 2015, 97). The significance of the breadth and quality of options implies that the opportunity conception collapses the distinction between positive and negative freedom.

from a presumption against interference, which may also be overridden. Interference can promote other goods or can even enhance freedom by increasing one's options through interventions such as vaccines, medical treatment or evacuation; likewise, the law restricts freedom through coercion in order to guarantee equal liberty and protect rights.

Descriptively, one important aspect of captivity is a set of abnormal restrictions on freedom, understood as a range of options. Abnormality is construed in reference to a relevant standard—e.g., a species-specific norm, a set of intrinsic abilities, a temporal baseline prior to the restrictions, or any appropriate comparison class depending on context. For instance, whether animals still have viable counterpart populations in other habitats or whether their organisms have been irreversibly altered are factors that can determine the relevant standards. One plausible baseline for evaluating the freedom of animals whose habitats are destroyed is how members of the closest corresponding population fared prior to urbanization, combined with knowledge of their natural range of species-typical behaviors and facts about the current population. The assessment is compatible with urbanized populations having evolved or developed adaptations (cognitive, behavioral or physiological) that distinguish them from their rural counterparts. The point is: these facts circumscribe a standard of flourishing that could be realistically achieved without altering the kinds of creature they are. A comparative assessment, assuming a non-arbitrary comparison class can be constructed, explains why we resist the intuition that children are captive: because their freedom is not abnormally restricted relative to the expected or standard developmental path of humans. Or we can emphasize that captivity typically involves *significant* restrictions. For babies, there are no realistic alternatives under which they could do something that is limited by their captivity. The difference then accounts for our different evaluative judgments about such restrictions.

Of course, if animals cannot be free, whether as an empirical or conceptual matter, then they cannot be deprived of freedom.⁸ On the other hand, if they can be captive, then they can be free. And surely some animals are captive in some sense. Animals on factory farms are confined, cannot roam freely and have little to no control over what to eat, where to rest, or when and with whom to hang out, bond or mate. Many people think that their special obligations to their pets arise

⁸ Leahy (1991) makes an argument along these lines. See Jamieson's (2003, chapter 12) reply.

in part from the fact that they keep them captive.⁹ It is clear that animals can be captive. On my account, then, they can be free.

We don't need a sophisticated account of animal freedom. Most animals lack rational autonomy, or the metacognitive ability to reflect on their desires and frame and revise their own conception of the good life, an ability taken by some to ground the intrinsic interest in liberty (Cochrane 2009; 2012). Yet they can exercise some autonomy in making choices about what to do, when, where and with whom to do it (as the agency of urban animals, their craft, resourcefulness and problem-solving skills, will illustrate). Whether freedom matters for its own sake or merely as a means to other goods, captivity abnormally interferes with it. Furthermore, having options matters to animals even if they cannot form higher-order representations of what their available options are. Sure, having this ability, as humans and perhaps apes, elephants or cetaceans do, makes restrictions worse, but options *themselves* are valuable. Fortunately, we need not solve the vexed question of whether freedom is intrinsically or merely instrumentally valuable for animals. Sufficient to undergird an ethical evaluation of captivity is the idea that freedom matters non-instrumentally, even though it may not matter for its own sake, as part of what Gruen (2002) calls "intermediate" forms of valuing. Freedom is valuable in that it allows us to do things, but it would still matter to us even if such things could be done for us. We value a good life partly in virtue of being free. Schmidt (2015) sidesteps the question and argues that freedom is "*non-specifically* instrumentally valuable," a means to other goods that cannot always be identified in advance, and is therefore not easily substitutable (i.e. instrumental interests cannot easily be satisfied by other means). Freedom has non-specific value as a "social ideal" (governing our mutual relationships) even when it is only instrumentally valuable. Henceforth, I will consider animal freedom as (at least) non-specifically instrumentally valuable (and perhaps constitutively valuable).

Captivity, when it significantly restricts agency, thus undermines the material conditions constitutive of a good life. Such conditions include the physical and social environment central to flourishing, ranging from access to territory, resources, mates and companions to opportunities for play and exploration. Even if we could provide captive animals with all the goods that freedom is instrumentally conducive to, and even if animals do not value freedom for its own sake, captivity

⁹ Streiffer and Killoren (2018) argue that animal use, which often comes with confinement, generates special duties.

would still undermine the material conditions of a good life, by impairing one's ability to do by oneself that which matters to oneself.

So, while captivity certainly implies confinement, it also involves substantial *control* over the movement, choices and actions of the captives. As Lisa Rivera (2014, 249) puts it, captivity is a “condition of powerlessness over one's options”.¹⁰ Of course, not absolute powerlessness. Many captives retain some degree of freedom and capacity of resistance, even in extreme conditions. Still, many captive animals have little power over their options (which confinement on its own does not entail). Captivity thus involves *restrictions*, of which confinement is one species. Streiffer (2014) explains the distinction as follows. While I may be prevented by external obstacles from accessing a number of places, or leaving a particular region, I may not be confined. Prisons, on the other hand, are smaller than the remaining subregion of the relevant area that prisoners are barred from accessing. Confinement is thus more than exclusion. But captivity is also more than confinement.¹¹ I can be temporarily confined as a measure of protection or self-defense, or as part of a game, or on a plane stuck on the tarmac. Captivity involves specific *types of restrictions* that frustrate particular interests. When restrictions involve domination, they frustrate one's interest in autonomy. Not all restrictions are harmful or incompatible with autonomy—independently of whether they are morally or legally justified, albeit harmful. Moreover, some restrictions “have only instrumental relationships to an autonomous individual's interest in autonomy” when it can be satisfied in other ways (Streiffer 2014, 188). Finally, not all captives have an *intrinsic* interest in autonomy. A meaningful account of captivity must not be so broad that any restriction of the exercise of

¹⁰ Rivera suggests that, almost always, the captive is harmed and the captor benefitted by control (2014, 249). Donaldson and Kymlicka (2016, 237) imply that captivity is an inherently evaluative concept. Here, I argue that captivity need not benefit or be intended by the captor or harm the captive all things considered. Captivity is typically harmful, but our *concept* need not reflect this contingent fact.

¹¹ According to Streiffer (2014, 179), confinement involves external limitations on movement; captivity involves the additional exercise of dominion. Streiffer goes on to question the validity of the distinction based on counterexamples: babies and prisoners meet the criteria, yet only the latter are captive. I have two replies: first, babies are controlled not so much to impede as to foster their potential autonomy; second, revisionary conceptual analysis can bite the bullet: yes, babies are captive. More generally, my account will imply that many more sorts of individuals are captive than previously thought, including severely exploited workers, refugees, and the homeless. Waldon (1991) for instance, has argued, persuasively to me, that homelessness involves unfreedom. Should we think that we are *all* captive insofar as we reside in cities and/or depend on and are coerced by the modern state? If captivity entails unfreedom, which entails moral responsibility (e.g. Schmidt 2016), then we are only captive when we are unfree as a result of somebody's intentional agency (broadly construed to include negligence and culpable ignorance). This normative conception of unfreedom is compatible with what I later call the value-neutrality of captivity.

autonomy (e.g., legal coercion) makes one captive. Nor should it be so narrow as to preclude the captivity of those who lack an intrinsic interest in autonomy (children and animals).

Let us take stock. Captivity typically involves *abnormal restrictions of freedom—centrally, of movement—construed as opportunity (or options) relative to appropriate standards*. And by depriving one of freedom, which is *non-specifically valuable as a non-substitutable means to the components of a good life*, it impairs one’s ability to live a good life. After these preliminary distinctions, I now turn to Gruen’s account of captivity, on which I will rely onwards.

1.2. Gruen’s account

There are unsurprisingly few attempts to define it, but based on the previous considerations, I think Lori Gruen’s proposal is very plausible:

To hold someone captive is to deny her a variety of goods and to frustrate her interests in a variety of ways. Though conditions of captivity vary considerably, I think it is most useful to think of captivity as a condition in which a being is confined and controlled and is reliant on those in control to satisfy her basic needs. (Gruen 2011, 133)¹²

On Gruen’s account, captivity consists in three joint conditions: *confinement, control, and dependence*. No criterion is independently sufficient. But if one’s needs and preferences are sufficiently central that foregoing their satisfaction would significantly impact one’s well-being, and one depends on someone who controls one for the satisfaction of such needs and preferences, and one is to a significant extent confined, then one is captive.

I will show that many urban animals meet the criteria. On its face, the verdict is counterintuitive. These animals are not captured, deliberately kept, or restricted to neatly delineated boundaries. None of these features, however, are essential to captivity. First, many captives were never captured (e.g., captive bred animals or self-surrendered prisoners) and many animals or humans can be captured temporarily without becoming captives. Second, accidental confinement can lead to captivity. An animal confined by a forgotten cage or trap is captive. Likewise, villagers

¹² In a footnote, Gruen specifies that the captive must be a “normally functioning adult” to avoid the implication that adults with severe cognitive disabilities and children are captive. As noted, I bite the bullet, partly because I do not want to build substantive assumptions into my analysis. But we can set the issue aside. When it is in fact permissible to keep someone confined, controlled and dependent, it does not follow that they are not captive.

could become the unintended captives of enemy troops if the latter did not realize some of their targets were (say) women, children or civilians. Conversely, we saw that restricting access to some area (exclusion), e.g., on safety grounds or to protect private property, is not sufficient for captivity. Finally, cult leaders, totalitarian states and abusive partners exert psychological control over individual's choices and actions, plausibly turning them into captives, even without using strict physical boundaries (see e.g. Rivera 2014). Conversely, boundaries such as borders, river crossings, mountain ranges, oceans, and walls are not sufficient for captivity. If these intuitive features of captivity are neither necessary nor sufficient, then we must be prepared to expand the boundaries of captivity on the basis of Gruen's account.

Her account accords with for our pre-theoretical judgments about cases: i.e. that animals in zoos, circuses, labs, farms, sanctuaries, shelters, houses, and parks are captive. The account also explains why captivity can be harmful, by depriving one of opportunities to access, enjoy or do certain things, and to do so by oneself. By the same criteria, I will now argue, captivity is more pervasive than our pre-theoretical judgments assume.

2. Pervasive animal captivity

2.1. Preliminary considerations

Captivity involves abnormal restrictions on option-freedom, and whether one is captive depends on the type of restrictions at issue. This will be true of urban animals. The relational nature of captivity undergirds this potential variety. Each of the above criteria involves a relational dimension. Captivity is a relation between a captor and captives, both of which can be individuals or collectives. To see this, consider that captivity is not mere inability. Schmidt (2016, 181) captures the distinction:

Sources of unfreedoms are typically considered 'man-made' or 'interpersonal'. If someone locks me into her basement, for example, I am subjected to a constraint imposed by another person. Compare this with mere disabilities: the constraints that make me unable to fly to Mars or unable to run one hundred meters in under ten seconds do not seem attributable to another person ...¹³

¹³ On Schmidt's (2016) view, a constraint makes a person unfree to X if and only if (1) someone else was morally responsible for the constraint and (2) it impedes an ability to X that the person would have in the best available

Dichotomies separating natural (and wildness, wilderness) vs. man-made (and artificial) environment are inadequate; arguably, the appeal of such dualisms may explain the relative lack of interest in urban environmental among environmental ethicists (Light 2001). Still, if only for pragmatic purposes, anthropogenic constraints raise concerns that differ in kind from the effects of animals adapting to natural circumstances. By that token, not every external obstacle is a source of unfreedom, if it is under no moral agent's control to remove or prevent it (Schmidt 2016, 188-9). Captivity, as a deprivation of freedom, consists of restrictions on options imposed by a captor, or that a captor fails to lift or prevent, whether voluntarily, negligently, or through culpable ignorance. The many shapes and shades of captivity thus depend on captors' and captives' respective features. My focus in this paper is what I call *pervasive captivity*.

As we extend the scope of agency across a wide range of habitats and species, we also realize that our actions have consequences that permeate all spheres of animal life and end up restricting to some extent the agency of many animals. In the Anthropocene, human production, consumption and development have a pervasive impact on species, habitats, ecosystems, landscapes, and climate. We restrict animals' agency by keeping them confined in tight cages, crates and enclosures, but also by limiting the scope of what they can freely do outside of visible captivity. Habitat destruction and fragmentation, unfettered development, and climate change together affect the conditions under which animals had long evolved to thrive. Since even protected areas like natural reserves are heavily monitored, regulated and spatially bounded, there are few tracts of land, air or sea where animals are not in some way and to some extent confined, controlled and dependent on human agency. That is, they are captive. Just as human/nonhuman boundaries collapse along the agency spectrum, so does the captive/wild boundary (also see Bekoff and Pierce 2017; Donaldson and Kymlicka 2017; Jamieson 2017). Is there then something special about urban areas among other human communities? As noted early on, I take urban wildlife as a specific case study of pervasive captivity. Human communities alter landscapes such that they constrain animals' behavior, migration, and hunting grounds, through fences, traps, and other barriers, potentially making them dependent on those changes, and exercise some control over those populations. Pervasive captivity thus applies to natural parks, wildlife reserves, and rural farming communities,

distribution of abilities. This conception reconciles the negative (non-interference) and positive (ability) aspects of socio-political freedom. Schmidt's (2015) argument for animal freedom does not turn on which theory—freedom as non-interference vs. as ability—applies.

because it interferes with their options-freedoms in ways that do not allow for substitutability.¹⁴ Urban wildlife is one striking illustration of pervasive captivity, but there are others. Consider each of Gruen's criteria as they apply to at least some of urban wildlife.

- (i) *Confined*: their range of movement is severely restricted to, or between, particular urban areas; their migration can be thwarted or constrained by features of the urban landscape (buildings, roads, bridges, power plants, wires, fences, lights, etc.). Because the restrictions are severe relative to their natural range, many populations are confined, not just excluded.
- (ii) *Controlled*: individuals, organizations, institutions, practices, patterns of behavior shape and constrain, locally or globally, individually or collectively, their options. Once again, control here is understood to be severe relative to a natural baseline.
- (iii) *Dependent*: in part because of (i) and (ii), urban animals are reliant on human provision or waste and specific ecological niches for meeting their basic needs, including reproduction, which is shaped by practices of culling and birth control.

Along each of (i)-(iii), animals' options can be restricted, hence animals can be unfree.¹⁵ While each applies to some degree to many urban animals, there is variety in both degree and kind, depending on species and urban ecology. Cities are not homogenous (internally and with respect to each other); each is home to diversity of species, places and arrangements. So, we should expect the particular contributions of each factor to cause various degrees and kinds of captivity.

2.2. *Types of urban captivity*

In one of the first philosophical discussions of urban animals, Clare Palmer (2003a) analyzed the effects of urbanization on animals through the metaphor of "colonization," drawing on Foucault's work on power. Neither the metaphor nor Foucault's work will be central to my account (although

¹⁴ For an illustration of the problem, consider the ecological objections to President Trump's "border wall." See e.g. <https://www.vox.com/energy-and-environment/2017/4/10/14471304/trump-border-wall-animals> (Accessed April 14, 2019).

¹⁵ In my view, captivity is stronger when the sources of (i)-(iii) coincide, but the captor can be distributed across different sources jointly constitutive of captivity. For instance, one may take advantage of natural barrier (water, cliffs, or predators) to exert control over a particular population and make it dependent. The factors can also interact; for instance, dependence can induce confinement, as when workers or children are confined because they depend on a living wage or parental care. Dependence is both a consequence and an enforcement mechanism of captivity.

it is interesting to note that the metaphor is apt to describe both human and nonhuman movements into one another's territory) and Palmer was also not concerned with captivity. My nod to her work does not imply that she took her account to imply my thesis. These caveats aside, features of colonization—displacement, dispossession, and transformation—are key to pervasive captivity. And Palmer offered a taxonomy of urban human-animal relationships that illustrates its diversity: death/avoidance, scavenging, immigration, display.¹⁶ The effects of urbanization are varied, but the most visible ones are spatial. Besides the destruction, fragmentation and alteration of their habitat, animals are killed, repelled, 'translocated', excluded by fences, wires, roads, and impasses, confined to protected places, or accommodated by nesting sites, underpasses, corridors, and road warning signs. Thus, given the continuous movement of urbanization, affected wildlife is continuously on the move; urbanization affects animals' range of movement and choice, for exploring, foraging, mating, nesting, migrating, resting, etc. Palmer's taxonomy brings together the different ways in which this feature is realized.

2.2.1. *Avoiding*

One strategy deployed by urbanizing communities is to simply eliminate unwanted populations, through shooting, trapping, poisoning, or gassing. But since, Palmer notes, animals are often made invisible by colonization, targeted elimination is relatively rare. Animals are more likely to be killed or displaced accidentally. Animals typically respond to disturbance by immediate "flight" or "flush" behavior and, over time, learned avoidance (Theobald et al. 1997, 26; Palmer 2003a, 50), for instance by shifting from diurnal to nocturnal activity.

Whether adaptations reflect heritable evolutionary changes, phenotypic plasticity, or social learning is disputed; they probably involve some combination. Regardless, for many animals, urbanization leads to major adjustments in pursuit of their needs, desires and preferences, which (as discussed in section 3) may or may not affect their welfare. For instance, disturbances include attenuated physiological responses to stressors (reflected in bolder behavior) in order to avoid stress overload (Atwell et al. 2012). Ample evidence shows that birds of many species alter their songs in response to anthropogenic noise pollution, singing louder and at higher frequencies than their rural

¹⁶ The categories jointly exhaust the possibilities but are not mutually exclusive—a feature rather than a bug given the porous and fluid processes they seek to capture. I leave out display, which involves captivity in a less interesting sense (e.g. zoos, circuses, and parks).

counterparts. Urban species have adapted to city life, to smaller homes and novel food sources, altered their sleeping and foraging patterns, learned how to cross busy roads, where to hide, rest and mate.

2.2.2. *Scavenging*

Scavengers raise distinctive issues: they seem to live with us willingly. Avoidance and scavenging thus point in opposite directions: confined either *outside* or *within* human range (with some intermediate cases like coyotes).

Some scavengers are “described as colonizers of urban areas, rather than as colonized beings moving in spaces they formerly occupied” and considered “unwelcome”, pests or vermin, because of what Foucault called “unruly bodies” (Palmer 2003a, 51). In U.S. metropolitan areas, rats, pigeons, squirrels, raccoons, and roaches come to mind; foxes, grey (vs. red) squirrels, and badgers in the U.K.; bears, monkeys, panthers, pigs and goats elsewhere. Scavenger unruliness is constitutive (they were not deliberately shaped or bred) and behavioral (e.g., urination and defecation, smelling, rummaging in trashcans, eating refuse, unrestrained whereabouts) (ibid). Conceding habitat, these “animals are ‘canalized’ into particular paths and routes by fences, walls and other obstacles.” (ibid) Hostile responses to unruliness curtail their options even further.

Many scavengers are partly dependent on human provision, whether directly (feeding) or indirectly (leftovers and garbage). Sometimes voluntary human provision made them dependent. For example, mallards on a riverbank benefit “from the warmer urban climate and longer ice-free periods” and humans welcome them. (p. 52) They then become dependent. Initially very adaptable, they adjust to humans, becoming not only more docile and less fearful, but also increasingly reliant on them for their basic needs. The ensuing “docile body” is still constitutively wild but desirable enough to earn human affection. The relationship, however intended by humans and “seductive” on the part of ducks, is not symmetric. Were humans to withdraw provision, or to suddenly consider them undesirable, the ducks would be adversely affected; humans would not. Their dependence has made them especially vulnerable as they traded their adaptability for docility. Eastern gray squirrels and street pigeons tell a similar story. Feeding them used to be quasi-institutionalized in some places where it has become illegal (Jerolmack 2013; Palmer 2003b; Benson 2013). As they became dependent on human provision, animals gradually lost options to escape,

evolving in particular niches and losing skills required to adapt to unexpected changes.¹⁷ These animals are trapped in the niche they have constructed (which alters the nature of their organisms and/or population): they are (i) confined to where their odds of survival are highest; (ii) controlled by “external practices,”¹⁸ including those that result in docility and desirability; (iii) and dependent, largely as a result of (i) and (ii).

Animals that best succeed are opportunists or generalists with flexible diets and dispositions to problem-solve, such as coyotes (Gehrt 2004, Gehrt et al. 2011, Lowry et al. 2013). Other species, niche specialists as well as some introduced exotics and feral animals are less flexible and therefore more vulnerable to change (Donaldson and Kymlicka 2011, 221-226). In urban contexts, boldness and curiosity will pay off for many (e.g., raccoons, house sparrows); neophobia and wariness for others (e.g., coyotes, many birds). Coyote expert Stanley Gehrt and his colleagues note that

the urban coyote appears to be behaviorally misanthropic (e.g., strong spatial and temporal avoidance of people) but demographically synanthropic (e.g., elevated survival and density, possibly reproduction). This unique combination has likely played an important role in the success of coyotes in urban areas (Gehrt et al. 2011, 17).

Coyotes are nonetheless captive: (i) largely precluded from avoiding us for lack of alternatives; (ii) monitored and managed by animal control and wildlife services; (iii) reliant on urban areas to the extent that they owe their success to their “demographical synanthropy”.¹⁹

Street pigeons (as opposed to homer, show and wild pigeons) thrive in urbanized environments, but they are largely dependent on human provision, subject to human control, and confined to urban spaces. “Conditioned by the genes of their cliff-dwelling and ground-feeding ancestors, and by selective breeding,” writes sociologist Colin Jerolmack (2013, 73), they “do not even retreat to sewers, trees, or parks to defecate, mate, and live, as do so many other animals.” They are synanthropes who prefer the built environment (p. 11), yet we tend to perceive them as

¹⁷ Some animals manifest dispositional, “noncognitive trust” (Palmer 2003b, 75; Becker 1996). They thus have expectations that we can betray without notice.

¹⁸ External practices are, on Foucault’s view, practices that affect the bodies and environments of animals, including confinement, isolation, eviction, castration, mutilations, etc. (Palmer 2001, 355)

¹⁹ Recent evidence suggests that in coyote parents who experience extended contact with humans, habituation leads, through phenotypic plasticity, to the transfer of fearlessness to their offspring over the course of just a couple generations. Each litter of pups was bolder than the previous litter (Schell et al. 2018)—and advantage as well as a risk in urban areas.

dirty, “unwelcome ‘invaders’”²⁰ (p. 7). In fact, pigeons are geographically restricted by their reliance on society. Even though their ancestors, Rock doves, partly domesticated themselves (and then escaped pigeons started to populate cities), many restrictions make them captive.²¹ A striking case is that of the pigeons of Trafalgar Square, London, and Piazza San Marco, Venice, who “have been tamed [and] ... become fully dependent on people for food and have stopped scavenging.” (p. 74) As their dependence grew, their status shifted: “both sites famously hosted vendors who sold pigeon feed. It was a tradition for visitors to allow the ravenous flocks of pigeons to land on their shoulders and eat from their hands.” (p. 6) Then both cities decided to evict the vendors, to redefine pigeons as ‘rats with wings’ and to ban feeding (geese, gulls, crows and starlings are also ‘rats with wings’ to many). Accordingly, many cities implement forms of control, from futile anti-pigeon tactics (plastic owls, spikes, sounds of raptors, shooting, electrocuting, poisoning...) to the criminalization of feeding. They also attempt to relocate them from their “improper” to their (imaginary) “proper” place (Philo 1998, Philo and Wilbert 2000); “like weeds in the cracks of pavement, pigeons represent chaotic, untamed nature in spaces designated for humans” (Jerolmack, p. 73) Is this confinement or merely exclusion? I guess it depends on cases, but as writes Jerolmack, because they are considered “out of place,” there are few other places for street pigeons to be: “*Columba livia* is now a ‘homeless’ species, surviving in the urban interstices off of society’s occasional generosity and its refuse.” (ibid.)

2.2.3. *Immigrating*

Let me briefly mention Palmer’s third category, exotic species that colonize urbanizing areas. Whether to remedy damage or conflicts, or because of stigmatization, nonnative animals face aggressive practices of control, confinement, or extermination by public health departments, animal organizations and pest control businesses. Public and private actors police their whole lives “and ultimately [determine] whether or not they continue to live.” (Palmer 2003a, 54) Insofar as they

²⁰ Epidemiologists consider the public health risk of pigeons very low, even though the annual cost of their damage to property in the U.S. might be as high as \$1.1 billion (Jerolmack 2013, 9).

²¹ Comparisons with their wild counterparts are hard because street pigeons “never existed in the wild.” (Jerolmack 2013, 10)

cannot relocate they are confined to restricted territories; insofar as they adapt they may become dependent on their new habitat. They are, either way, captive.²²

Across these different types of urban human-animal relationships captivity can arise. Whether animals will avoid or seek out humans is a matter of personality, with great variability across species, regions, rural versus urban, as well as individuals (Gehrt et al. 2011; Lowry et al. 2013; Miranda et al. 2013). Despite differences, we can pick out the defining features of captivity. Many urban animals are *confined*, physically, spatially and behaviorally; subjected to *control*, both deliberate and accidental, over their agency, habitat, or simply whether, where and how long they live; *dependent* on the environment they have adapted to and on human tolerance or assistance, thus foreclosing alternatives. Further, once they have been shaped by urbanization, animals—whether individuals, populations or species—can become *constitutionally* captive (see Horowitz 2014 and section 3). On the other hand, degrees of freedom (e.g. to avoid or relocate) and types of restrictions yield varying degrees and types of captivity. For instance, mountain lions in Southern California, I would argue, are captive but they are not heavily dependent (see e.g. P-22’s profile in Goodyear 2017; also see Riley et al. 2006); conversely, street pigeons are quite dependent, but their confinement is less striking (both are subject to control). Still, both pigeons and mountain lions see their agency impaired as a result of urbanization, whether externally (the lions’ habitat) or internally (the pigeons’ dispositions). These are all illustrations of the ambivalence of pervasive captivity. In fact, as the next section explains, it isn’t clear in what sense their captivity should be considered significant. I will now address an important question about the value of captivity for urban animals.

3. Cushy captivity

Animals can be kept for their own good, such as pets or animals in sanctuaries and shelters. Some people even argue that animals in labs, farms and zoos can have good lives they otherwise not have. Yet many people believe that life in captivity is bad. So, the Cushy Captivity objection goes, because animals are *not* worse off in cities and captivity is necessarily harmful, whether instrumentally or intrinsically, they are *not* captive. For instance, gaining access to food is a way for coyotes to enhance their freedom; cities all provide freedom from predation to smaller animals. And many

²² Illustrating a fluid taxonomy, “display” animals such as parakeets can escape from their intended captivity, thus moving to the category of immigrants. Migratory species may not be concerned as long as they retain their ability to migrate.

animals appear to assent (at least not dissent) to urban life (although species themselves never chose to). In what follows, I offer two replies to this objection. Note that my general view of captivity does not turn on the truth of a particular theory of well-being. Objective-list (i), hedonistic (ii) and desire-fulfilment (iii) theories (Parfit 1987, Appendix I) can all plausibly claim that urban animals are not worse off, because (i) they fare well enough on other counts on the list, such as health, integrity, pleasure, or social relations; or (ii) their balance of pleasant experiences is net positive; or (iii) most of their preferences are satisfied (otherwise, you'd think, they would relocate). But all theories can also claim that urban animals are harmed by captivity.

3.1. *Adaptive preferences*

We could start by denying that urban animals flourish; and even if they once did, they no longer do. There are examples of species whose *individual* members clearly do not fare the best they could. Case in point, urban pigeons have shorter life-expectancies and higher mortality rates, suffer more from debilitating injuries, impairments, and diseases, and may be exposed to more direct threats (e.g., hawks, owls, cats, humans) than their rural counterparts. Few pigeons in NYC live over a couple years; even then, their lives are often miserable.²³ As explained below, how species and individuals fare are distinct questions.

We can also appeal to the notion of *adaptive preferences* (see Elster [1983]; Nussbaum [2001, chapter 2] and [2006, 343-4]), that is, preferences formed or changed, typically subconsciously, under bad or unjust conditions such as profoundly limited sets of options. If we assume that urban animals have formed or changed preferences under such conditions, having preferences that track their situation provides little evidence that they would otherwise maintain them. Instead, animals accustomed to urban life may have adjusted their preferences toward something suboptimal, and this may include captivity (like coyotes become bold even at their own expense).

Now, not all changes in preferences, even those due to bad or unjust conditions, are necessarily illegitimate or inauthentic. So, even while one may not infer from an animal's preference to stay in an environment that this environment is better for them, their preference is not necessarily adaptive. Moreover, even if it was adaptive, it would necessarily be bad for them. Still, I believe a case can be made that at least some of urban animals' preferences are driven, suboptimally,

²³ On this point I am indebted to conversation with Colin Jerolmack.

by a need to cope with an environment to which they have to adapt. This is because, as already argued, their range of options is sometimes severely restricted, so we should expect some of their preferences to be adaptive.

Adaptive preferences and captivity may even be co-constitutive. A helpful analogy is that of a Stockholm syndrome, where hostages and victims of kidnapping come to prefer their captivity.²⁴ Because they see no possible escape, victims modify their set of preferences, including their preference for escape. While such coping mechanisms can be effective ways to compensate for welfare loss under unfavorable conditions (e.g. pacing in response to stress, anxiety, and boredom in zoos), they are not reliable indicators of good welfare. In fact, adaptive preferences can signal impaired autonomy and welfare. So, an adaptive preference for captivity does not make it valuable. My reply is not that having adaptive preferences are necessarily prudentially bad (or irrational ones to have)²⁵; simply that, when one has such preferences they do not reliably indicate how well one's life is going, especially if, as with animals, we cannot collect first person testimony. Thus, ethological preference testing may not help much to identify how well animals are doing in the circumstances, given their limited options; what animals prefer under the circumstances is at best a partial indicator of the choices they could make.²⁶

In sum, just because rats, pigeons and coyotes appear to thrive among us does not mean that we cannot do better and enhance their freedoms. The relevant baseline for identifying relevant needs and/or preferences need not be a romanticized rural life; rather: an urban ecosystem that could accommodate their freedom. Objective-list and (informed) desire-fulfillment theories of well-being can agree with this diagnosis. In Parfit's words,

We should also appeal to the desires and preferences that I would have had, in the various alternatives that were, at different times, open to me. One of these alternatives would be best for me if it is the one in which I would have the strongest desires and preferences fulfilled. This allows us to claim that some alternative life would have been better for me,

²⁴ Barnes (2016, 127) also connects adaptive preferences and Stockholm syndrome.

²⁵ One may plausibly argue that adaptive preferences as such are not necessarily bad or irrational (Barnes 2009; Bruckner 2009; Terlazzo 2017).

²⁶ We should not conflate population flourishing with individual welfare. Many of the adaptations that facilitate urban life are not prudentially beneficial or harmful. Mutations and genetic drift are random processes irrelevant to welfare.

even if throughout my actual life I am glad that I chose this life rather than this alternative.
(Parfit 1987, 496)

The hedonist should agree. Or else they must show that one's mental states are not biased by options and could not be improved under different circumstances. But it is clearly relevant whether one's life could have been better (even hedonistically) had one taken a different path.

3.2. *Value-neutrality and harmfulness*

Let us concede for a moment that urban animals are better off in some respects than other wild animals, or than they would otherwise be. Rats are great city-dwellers, for example. Large cities like Chicago, Los Angeles and New York are testaments to their remarkable adaptations to urban ecosystems. If they are captive, captivity does not seem to bother them. Rats may be better off as urban captives. They might be living in cushy captivity. Assuming this is true of rats, what of most urban animals?

First, recall that captivity admits of various degrees and kinds. A mountain gorilla in a zoo and a mountain lion in the Santa Monica Mountains are not captive in similar ways. More importantly, how these animals fare overall is orthogonal to whether they are captive. Not every captivity has to be harmful overall, even if it is harmful with respect to freedom. And even when captivity is harmful, freedom may not be an option if there is no alternative where one would be better off. Just like captive-bred chimpanzees would not benefit from being returned to the wild, urban animals may face a "dilemma of captivity" (Gruen 2011) if they have been altered physically and behaviorally. Maybe some animals would be freer if they were translocated to preserved habitats, but maybe they would be worse off for it.

We can learn from dogs here. Alexandra Horowitz argues that dogs are *constitutionally captive*. "Their brain structure, and, as a correlate, cognition, has been altered. They no longer have the perceptual acuity to survive outside of human civilization." (Horowitz 2014, 13). What it means to flourish as a domestic dog (*Canis familiaris*), as opposed to their wolf ancestors (*Canis lupus*), entails captivity. Pet keeping practices can be harmful and maybe dogs could have been better off had they not co-evolved with us, but as things stand, dogs are "a species who was selected to be kept" and is too "dependent on us for food and protection (p. 18). A dog's captivity is *de facto* compatible with the most freedom possible "within the constraints of his speciesdom." As individuals, however, dogs can be subject to different levels and kinds of confinement and restriction (physical, social,

sexual, sensory, dietary). Freedom can be enhanced *within* constitutional captivity. Similarly, I submit, captivity could be compatible with the most freedom possible for some urban animals.

In sum, captivity is not harmful *simpliciter*, but only depending on context and relative to alternatives.²⁷ For those whose well-being is contingent on the confines of captivity it can be *locally* bad (freedom-wise) yet *globally* good.²⁸ My response to Cushy Captivity has two prongs: first, urban animals' preferences and adaptations are not reliably reflective of their welfare; second, the relation between welfare and captivity depends on how it affects a creature's interests on the whole. Of course, something else is true of urban animals who benefit all things considered from their captivity: it is probably not morally wrong to treat them so. This, again, speaks to the second prong. But the point stands: *if* they don't benefit globally, the fact that animals benefit locally does not rule out the possibility that their freedoms could be enhanced (or less severely diminished). With these caveats in mind, pervasive captivity does have ethical implications, to which I now turn.

4. The ethics of pervasive captivity

Even though my analysis of captivity *per se* is morally neutral, captivity often matters morally, when it frustrates morally significant interests related to one's option-freedoms, whether in relation to mental states, preferences, or an objective list. This section outlines what normative implications we can draw from the descriptive groundwork I laid out.

I have used the terms free and captive as contrast terms along a spectrum. Most urban animals are freer than most zoo animals; fully wild animals are also constrained by their environment;²⁹ some urban animals are not globally worse off for being captive. In pervasive

²⁷ DeGrazia (2011, 741), too, argues that restrictions of liberty are only harmful when they "significantly interfere with an individual's ability to live well."

²⁸ Barnes (2016) argues for a value-neutral view ("mere difference") of disability.

²⁹ The agency of wild animals is impaired by natural forces (predation, parasites, competition, weather...). But natural forces aren't captors, even when the agency of some animals is the determining source of constraint. Not because captivity must be intended as such, but because it is something that is under our control. Our pervasive impact on animals is thus qualitatively different from the impact that animals have on one another. This doesn't mean that we lack reasons to be concerned about the freedom of wild animals (e.g. our ability to intervene to make their lives better might be sufficient to ground an obligation), and I am not denying that our responsibility could extend further than I argue here. But urbanization leads other species to coexist with each other in more or less peaceful ways over which we have some control (see e.g. Mueller et al. 2018 on coyotes and red foxes).

captivity, wild animals are not visibly confined and have more room to express their agency.³⁰ Still, there is a clear sense in which urban animals are typically less free than fully wild animals, and captive yet freer than zoo, lab or farm animals. Pervasive captivity involves some degree of freedom (of movement and choice of mate, den or food), but only within significant anthropogenic constraints. Because captivity is context-dependent, its moral significance varies according to two factors: the *type* of restrictions (along dimensions of confinement, control and dependence) and the *strength* of one's freedom-based interests.

In section 1, I noted a common moral presumption against keeping animals captive without proper justification. On this presumption, captivity is *pro tanto* and locally harmful to animals if they have an interest in the sort of freedom that captivity thwarts, and it is wrong to cause it without proper justification. As noted, there are cases of constitutional or beneficial captivity in which the presumption fails to imply that we should act differently. Still, where restrictions interfere with central option-freedoms in ways that do not allow for substitutability, captivity is harmful. Let me now sketch how my account could fit with a broad view of our duties to wild animals.

4.1. *Relational positive obligations*

If urban communities are a morally distinctive type of community, they are plausibly the source of distinctive obligations. If, as Palmer writes, “in most cases humans are causally responsible for the presence of animals” and “these urban animals are directly or indirectly dependent on humans for life support” (2003b, 68); if, further, we are causally responsible, through actions or omissions, for their (harmful) captivity and we assume that moral responsibility tracks causal responsibility, then we have positive obligations to urban captives (like we have duties of assistance to those who depend on us or whom we made vulnerable; Palmer 2010). This is true even in cases where captivity is unintended—when its causes were under our control but we acted negligently and failed to prevent or lift the relevant obstacles. At the very least, we have a negative duty not to abnormally restrict urban animals' freedoms and, positively, we “owe relict populations of wild animals space in which to continue to make a living” (Palmer 2003b, 71)—I would add: even if those spaces are

³⁰ Streiffer and Killoren (2018) offer an account of *agential* (as opposed to *comparative*) confinement that is narrower than my account since it involves the intention to confine, often “for the purposes or interests of others,” which amounts to *use*. They would consider pervasive captivity a mere form of exclusion. What matters, I submit, is that there be intentional agents who could (have) act(ed) in ways that do not significantly impair agency.

amongst us.³¹ Insofar as their ability to exercise their freedoms entails an adequate background environment, over which we have direct control, our duties extend to shaping better urban ecosystems. Donaldson and Kymlicka (2011, chapter 7) go further in arguing for denizenship rights for “liminal” animals, based on their distinctive type of community membership. Liminal animals are neither members of “wild sovereign communities” (with rights to territory and autonomy) nor “domesticated animal citizens” (with full membership rights), but denizens with rights of residency and accommodation. And, they argue, we should give liminal animals the option to co-author our mutual relations, for instance the option to “opt in” to or “opt out” of (citizenship or denizenship). Raccoons in Toronto opted in to denizenship; feral horses in Wyoming opted out of citizenship. Pervasive captivity, it seems, would compromise their ability to exercise that choice.

4.2. *Policy and challenges*

Discharging our positive and negative duties involves urban planning, green spaces and research and education about coexistence with urban wildlife, roles that various animal protection organizations, urban ecologists and urban planners can endorse.³² Building more “compassionate” cities might involve:

building green rooftops and green walls, planting native vegetation around homes and buildings, reducing the spatial footprint of buildings, implementing nighttime lights-out campaigns, restricting the use of highly reflective glass and glass facades that disorient birds, enforcing noise restrictions, and developing and maintaining nature corridors (Bekoff 2014, 91-92).

We can also contrast different elements of urban design. Compare bird spikes (hostile) and bird tree-houses (friendly). In 2009, a firm of architects won the Wildlife Design Competition to reintroduce urban wildlife in Holbeck Urban Village in South Leeds, UK. Garnett Netherwood Architects proposed an ‘Urban Takeback’ design, a tree-house style tower block recycled from old

³¹ Hadley (2015) argues for property rights for wild animals, but he is ambivalent about the implications for city-dwellers (p. 68).

³² See, for instance, the Lincoln Park Zoo’s Urban Wildlife Institute (<http://www.lpzoo.org/urban-wildlife-institute/>) and guidelines from the HSUS (http://www.humanesociety.org/animals/wild_neighbors/) (Accessed April 11, 2019).

buildings (it's unclear how much progress has been made since then).³³ The city of Los Angeles is carving 'pocket parks' into the urban landscape that could re-attract displaced wildlife.³⁴ As part of its Urban Wildlife Conservation Program, the U.S. Fish & Wildlife Service oversees wildlife refuges at the edge of urban areas across the country to support preserved areas or connect discrete patches of habitat.³⁵ While these examples are ways of endorsing our responsibility to urban *populations*, sanctuaries and wildlife rehabilitators also assist *individuals* that are injured or orphaned. These various accommodations go some way toward providing the adequate background environment for urban animals to exercise their freedoms.

Developing these ethical implications is of course not without difficulty.³⁶ The first challenge is to pick a baseline to make claims about abnormal restrictions; and to decide on a level of analysis: species, population, and/or individual needs and personality traits? We would need to consult urban ecologists and animal cognition and behavior experts. Another question is whether the captives are individuals or groups. The metaphor of colonization seems to imply a group-level form of captivity—communities or peoples are colonized. Perhaps, similarly, while particular animals are harmed by urbanization, it is a species (or population) that is captive to the city. Moreover, the obligations and corresponding policies—wildlife management, urban planning—seem best described at the group-level. This as a genuine concern, but insofar as a group is captive, its individual members will also be, even if the group's captivity is not just the sum of the captivities of its members.

The second challenge is to identify the responsible agents. The positive obligations may often be collective, and the captors typically unstructured, temporally extended collectives. Coyotes, say, become captive as a result of a loose aggregate of discrete actions—fencing, landscaping, construction, driving, agriculture, etc., none of which may be sufficient by itself and which all occur at different intersecting local and global levels of analysis (town, county, state, region...), potentially involving conflicting jurisdictions (e.g. between state and federal government concerning wild

³³ See http://www.bbc.co.uk/leeds/content/articles/2009/06/01/places_holbeck_wildlife_design_feature.shtml (Accessed April 11, 2019).

³⁴ See <https://www.scpr.org/news/2012/08/22/33979/la-partners-carve-pockets-parks-out-urban-core/> (Accessed April 11, 2019).

³⁵ See U.S. Fish & Wildlife Service: <https://www.fws.gov/urban/wildlifeRefuges.php> (Accessed April 11, 2019).

³⁶ I'm indebted to Clair Morrissey in the next two paragraphs.

horses in Wyoming³⁷). Furthermore, the political borders that define the human communities that could discharge collective obligations do not map only the natural boundaries of the territories and ranges of urban animals. This, too, is a genuine challenge. Still, just because collective harms raise complex issues for moral responsibility doesn't mean there is no moral wrong to account for. Different but compatible levels of analysis interact. The difficulty doesn't mean we cannot pick out agents who are in a position to act, such as urban planners, architects and designers, policy-makers, animal control and wildlife management agencies, animal and environmental organizations, and a range of private and public stakeholders. In fact, insofar as the problem is one of justice, we should *create the institutions* that will support justice to urban wildlife. Accordingly, different causal contributions (e.g. accidental vs. intentional) and different capacities and roles among these actors ground different levels and types of responsibility.

Finally, there may be conflicts to adjudicate among competing goals and values—those of biodiversity and population management vs. individual welfare, or public health vs. animal welfare, for instance. There may be trade-offs, such that in order to decrease the impact of urbanization on habitat we compromise the welfare of present individuals; or we might have to sterilize some individuals to control population, which in turns benefit other individuals. These are genuine ethical and practical challenges, but their importance should not diminish the ethical significance of pervasive captivity. If anything, they demand that we think more, not less, about the issue.

Conclusion

If we are bound to coexist with urban wildlife we must consider how urbanization affects animals' freedoms.³⁸ Urban life may have become a new form of life for these animals, and one they enjoy or benefit from, but this need not imply that we should not be concerned with promoting their well-being, including as regards their freedom, from within the boundaries of that form of life. We can and should help them adapt to their new environment by helping them construct the niches that support their well-being.³⁹ To sum up, then, wild animals can benefit from but are vulnerable to

³⁷ See <https://www.wyomingpublicmedia.org/term/wild-horses#stream/0> (Accessed April 16, 2019).

³⁸ These obligations do not preempt other duties or virtues. For instance, Michelfedler (2018) argues that an ethic of care generates obligations of attentiveness, flexibility, adjustment, and hospitality.

³⁹ Should we then *enhance* them, like we might genetically engineer species to help them adapt to climate change (so-called facilitated adaptation) (Palmer 2016)? I cannot explore these questions here. The enhancements I am considering

cities. And we need not claim that their lives are worse than they would be, say, in rural areas to agree that they are captive. But seeing these animals as captive sheds light on ways their lives could be better. I have argued that, insofar as they are confined, controlled and dependent, urban animals are captive and that seeing them in this light has ethical implications. One could argue that captivity is orthogonal to a case for building more sustainable and compassionate cities; perhaps we might reach similar conclusions without appealing to the idea of pervasive captivity. Still, the idea sheds light on a neglected aspect of urban ecosystems, and therefore on a neglected yet significant interest—a pragmatic framing benefit, if anything. The precise shape, content and strength of our responsibilities remains to be determined, but I hope to have shown that they may be greater than we assume, and that they involve regard for their interest in freedom.

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References

- Atwell, J. W. *et al.* 2012. Boldness behavior and stress physiology in a novel urban environment suggest rapid evolutionary adaptation. *Behavioral Ecology* 23(5): 960-969
- Barnes, Elizabeth. 2016. *The Minority Body: A Theory of Disability*. Oxford: Oxford University Press
- Barnes, Elizabeth. 2009. Disability and adaptive preference. *Philosophical Perspectives* 23(1):1-22
- Becker, Lawrence. 1996. Trust as noncognitive security about motives. *Ethics* 107(1): 42-61
- Bekoff, Marc and Jessica Pierce. 2017. *The Animals’ Agenda: Freedom, Compassion, and Coexistence in the Human Age*. Boston: Beacon Press
- Bekoff, Marc. 2014. *Rewilding our Hearts: Building Pathways of Compassion and Coexistence*. Novato: New World Library
- Benson, Etienne. 2013. The Urbanization of the Eastern Gray Squirrel in the United States, *Journal of American History* 100(3): 691-710
- Bruckner, Donald W. 2009. In Defense of Adaptive Preferences. *Philosophical Studies* 142(3): 307-324

are mainly environmental, but there may be permissible forms of genetic engineering that promote agency and flourishing.

- Cochrane, Alasdair. 2012. *Animal Rights Without Liberation*. New York: Columbia University Press
- Cochrane, Alasdair. 2009. Do Animals Have an Interest in Liberty? *Political Studies* 57: 660-79
- DeGrazia, David. 2011. The Ethics of Confining Animals: From Farms to Zoos to Human Homes. In Beauchamp, T. and Frey, R. G. (eds.), *The Oxford Handbook of Ethics and Animals* (New York: Oxford University Press, 2011), pp. 738-768
- Delon, Nicolas. 2018. Animal agency, captivity, and meaning. *Harvard Review of Philosophy* 25:127-146
- Donaldson, Sue, and Will Kymlicka. 2016. Between Wildness and Domestication: Rethinking Categories and Boundaries in Response to Animal Agency. In Bernice Bovenkerk and Jozef Keulartz (eds.), *Animal Ethics in the Age of Humans: Blurring boundaries of human-animal relationships* (Springer), pp. 225-39
- Donaldson, Sue, and Will Kymlicka. 2011. *Zoopolis: A Political Theory of Animal Rights*. Oxford: Oxford University Press
- Elster, Jon. 1983. *Sour Grapes: Studies in the Subversion of Rationality*. Cambridge: Cambridge University Press
- Gehrt, Stanley. 2004. Ecology and management of striped skunks, raccoons, and coyotes in urban landscapes. In Fascione, N., Delach, A., and M. Smith (eds), *People and predators: from conflict to conservation* (Washington, DC: Island Press), pp. 81-104
- Gehrt, S. D., Brown, J. L., and C. Anchor. 2011. Is the urban coyote a misanthropic synanthrope? The case from Chicago. *Cities and the Environment* 4(1)
- Goodyear, Dana. 201. Valley cats. *The New Yorker*, February 13 & 20, 201, pp. 44-51
- Gruen, Lori. 2002. Refocusing environmental ethics: From intrinsic value to endorsable valuations. *Philosophy and Geography* 5(2): 153-164
- Gruen, Lori. 2011. *Ethics and Animals*. Cambridge: Cambridge University Press
- Gruen, Lori, ed. 2014. *The Ethics of Captivity*. Oxford: Oxford University Press
- Hadley, John. 2015. *Animal Property Rights: A Theory of Habitat Rights for Wild Animals*. Lexington Books
- Horowitz, Alexandra. 2014. *Canis Familiaris: Companion and captive*. In Gruen (2014), pp. 7-21
- Jamieson, Dale. 2017. Animals and ethics, agents and patients. In Kristin Andrews and Jacob Beck (eds.), *The Routledge Handbook of Philosophy of Animal Minds*, Routledge
- Jamieson, Dale. 2003. *Morality's Progress*. Oxford: Oxford University Press
- Jerolmack, Colin. 2013. *The Global Pigeon*. Chicago: The University of Chicago Press
- Leahy, Michael. 1991. *Against Liberation: Putting Animals in Perspective*. London: Routledge
- Light, Andrew. 2001. The Urban Blind Spot in Environmental Ethics, *Environmental Politics* 10(1):7-35
- Light, Andrew and Wellman, Christopher H. 2003. Introduction: Urban environmental ethics. *Journal of Social Philosophy* 34(1):1-5
- Lowry, H., Lill, A. and B. B. M. Wong. 2013. Behavioural responses of wildlife to urban environments. *Biological Reviews*, 88 (3): 537-549
- Michelfelder, Diane P. 2018. Urban Wildlife Ethics. *Environmental Ethics* 40(2):101-117
- Michelfelder, Diane P. 2003. Valuing Wildlife Populations in Urban Environments. *Journal of Social Philosophy* 34(1):79-90
- Miranda, A. C., Schielzeth, H., Sonntag, T. and J. Partecke. 2013. Urbanization and its effects on personality traits: a result of microevolution or phenotypic plasticity? *Global Change Biology* 19: 2634-2644
- Mueller, M. A., Drake, D. and Allen, M. L. 2018. Coexistence of coyotes (*Canis latrans*) and red foxes (*Vulpes vulpes*) in an urban landscape. *PLOS ONE* 13(1): e0190971. <https://doi.org/10.1371/journal.pone.0190971>
- Nussbaum, Martha C. 2001. *Women and Human Development: The Capabilities Approach*. Cambridge: Cambridge University Press

- Nussbaum, Martha C. 2006. *Frontiers of Justice: Disability, Nationality, Species Membership*. Cambridge, MA: The Belknap Press
- Palmer, Clare. 2001. "Taming the wild profusion of existing things"?: A study of Foucault, power, and human/animal relationships. *Environmental Ethics* 23 (4):339-358
- Palmer, Clare. 2003a. Colonization, urbanization, and animals. *Philosophy and Geography* 6 (1):47-58
- Palmer, Clare. 2003b. Placing animals in urban environmental ethics. *Journal of Social Philosophy* 34 (1):64-78
- Palmer, Clare. 2010. *Animal Ethics in Context*. New York: Columbia University Press
- Palmer, Clare. 2016. Saving Species but Losing Wildness: Should We Genetically Adapt Wild Animal Species to Help Them Respond to Climate Change? *Midwest Studies in Philosophy* 40(1): 234-251
- Parfit, Derek. 1987. *Reasons and Persons*. Oxford: Clarendon Press
- Philo, Chris. 1998. Animals, geography, and the city: Notes on inclusions and exclusions. In Wolch, J., Emel, J. (eds), *Animal Geographies* (London: Verso), pp. 51-71
- Philo, Chris, and Chris Wilbert, eds. 2000. *Animal Spaces, Beastly Places*, London: Routledge
- Rachels, James. 1976. Do Animals Have a Right to Liberty? In T. Regan and P. Singer (eds.), *Animal Rights and Human Obligations* (pp. 205-223), Englewood Cliffs: Prentice-Hall
- Riley, S. P. D. et al. 2006. A southern California freeway is a physical and social barrier to gene flow in carnivores. *Molecular Ecology* 15: 1733-1741
- Rivera, Lisa. 2014. Coercion and captivity. In Gruen (2014.), pp. 248-271
- Schell, CJ, Young, JK, Lonsdorf, EV, Santymire, RM, Mateo, JM. 2018. Parental habituation to human disturbance over time reduces fear of humans in coyote offspring. *Ecology and Evolution* 8: 12965-80
- Schmidt, Andreas T. 2015. Why animals have an interest in freedom. *Historical Social Research*, 40(4): 92-109
- Schmidt, Andreas T. 2016. Abilities and the sources of unfreedom. *Ethics* 127(1): 179-207
- Sebo, Jeff. 2017. Agency and Moral Status. *The Journal of Moral Philosophy* 14(1): 1-22
- Streiffer, Robert. 2014. The Confinement of Animals Used in Laboratory Research. In Gruen (2014), pp. 174-192
- Streiffer, Robert and Killoren, David. 2018. Animal confinement and use. *Canadian Journal of Philosophy* 49 (1):1-21
- Terlazzo, Rosa. 2017. Must Adaptive Preferences Be Prudentially Bad for Us? *Journal of the American Philosophical Association* 3(4) : 412-429
- Theobald, D. M., Miller, J. R., and N. T. Hobbs. 1997. Estimating the cumulative effects of development on wildlife habitat. *Landscape and Urban Planning*, 39: 25-36
- Waldron, Jeremy. 1991. Homelessness and the Issue of Freedom. *UCLA Law Review* 39(1): 295-324